

Cornell Guided Notes

Biotechnology for Health (Biomedical Innovations) | 2027-02-10

Name

Period

Date

Lesson

Lesson focus

CAD floor plan modeling

Key words and questions

Prepared details and student notes

Essential question
What is today's target?

Model an ER floor plan using CAD or modeling tools that satisfies your criteria and constraints. Big idea: A physical or digital model makes abstract design decisions testable -- you cannot evaluate a floor plan you have not drawn.

My notes, examples, and questions

Key words
What vocabulary unlocks the lesson?

- design brief
- floor plan
- process flow
- staffing
- human factors

My notes, examples, and questions

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Cornell Notes - Continued

Key words and questions

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Must-know ideas
What should I understand by the end?

- How to use a CAD or modeling tool to create a scaled floor plan that communicates design intent.
- How to verify that a layout satisfies the criteria and constraints in your design brief.
- How patient-flow logic should govern the physical arrangement of rooms and corridors.

My notes, examples, and questions

Process notes
What happens during class?

- 0-10: Open the CAD or modeling tool and set the scale; review design brief criteria before touching anything
- 10-30: Sketch rough floor plan on paper using Monday's pre-lab sketch as a starting point
- 30-60: Model in the tool: place triage, treatment areas, corridors, and patient-flow path to scale
- 60-70: Constraint check: verify each constraint in the brief is satisfied by the current layout
- 70-77: Save and submit the floor-plan model file
- 77-80: Exit note: one constraint you had to compromise on and how you handled it

My notes, examples, and questions

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Steps and evidence What do I do and turn in?

- Sketch a rough floor plan placing triage, treatment, and flow paths.
- Open the CAD or modeling tool and set the scale.
- Model rooms, corridors, and the patient-flow path.
- Check that the layout meets your stated constraints.
- Save and submit the floor-plan model.

Evidence: Lab report - CAD or scale floor-plan model with labeled triage zone, treatment areas, corridors, and patient-flow path, verified against design brief constraints.

My notes, examples, and questions

Checks for understanding How do I know I got it?

- Your model places stations along a logical patient-flow path.
- Your layout satisfies your stated constraints.

My notes, examples, and questions

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Lab or safety notes
What must I handle carefully?

Safety:

- Digital tools only today -- no physical construction materials.
- Save your work to the school-approved cloud location, not only to local device storage.
- Do not install unapproved software; use only school-authorized CAD tools.
- Protect the integrity of your design file: do not share edit access with students outside your team.

Supplies:

- CAD or floor-plan software (school-provided or approved free tool)
- Ruler and graph paper for pre-build sketching
- Design brief (open during the session)
- Pencil for annotation
- Laptop or school device with software access confirmed

My notes, examples, and questions

Summary

Today's lesson focused on CAD floor plan modeling. The main target was: Model an ER floor plan using CAD or modeling tools that satisfies your criteria and constraints. The evidence of learning is Lab report: CAD or scale floor-plan model with labeled triage zone, treatment areas, corridors, and patient-flow path, verified against design brief constraints.. In my own words, the most important idea from today is:

My summary

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My final question or connection